

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this Examiner's Amendment was given in a telephone interview with Leland Weisner on May 8, 2009.

CANCELLED CLAIMS

Please **CANCEL** the following claims: 3, 11, 23-24, 26.

AMENDED CLAIMS

Please amend the following claims: 1, 19, 25.

1. (CURRENTLY AMENDED) A storage server in a storage area network connecting a plurality of host computers and a plurality of storage devices, said the storage server comprising:

a switching circuit in the storage server that connects a plurality of storage processors and associates a first storage processor from the plurality of storage processors with said plurality of host computers and further associates a second storage processor from the plurality of storage processors with said plurality of storage devices, wherein said plurality of storage processors in the storage server receive a plurality of command packets and a plurality of data

packets; and

a microengine in each of the plurality of storage processors to process said plurality of command packets and plurality of data packets using microcode and configure a routing path through said switching circuit to establish communication between the first storage processor and the second storage processor, wherein the microcode executing on the microengines from the first of the one or more of the plurality of storage processors is responsive to at least one command packet of said plurality of command packets and embeds routing instructions for the routing path directly in each data packet of said plurality of data packets over said path using one or more microcode instructions in the microcode thereby allowing initial routing operations for a data packet between said first storage processor and said second storage processor through said switching circuit to take place prior to completely receiving said data packet in the entirety, and further configures a plurality of paths between the second storage processor and a storage device from the plurality of storage devices in accordance with said command packet.

19. (CURRENTLY AMENDED) A method of routing data in a storage area network having a storage server between a plurality of host computers and a plurality of storage devices, the method comprising:

associating a first storage processor from a plurality of storage processors with said plurality of host computers and a second storage processor from the plurality of

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storage processors with said plurality of storage devices wherein said plurality of storage processors are in the storage server;

receiving a plurality of command packets and a plurality of data packets to be processed on at least one microengine associated with the plurality of storage processors;

configuring a routing path between a first storage processor and a second storage processor of said plurality of storage processors in response to receipt of a command packet of said plurality of command packets; and

embedding routing instructions from the routing path directly in each data packet of said plurality of data packets to be transmitted over said routing path thereby allowing initial routing operations for a data packet between said first storage processor and said second storage processor to take place prior to completely receiving said data packet in the entirety; and

configuring a plurality of paths between the second storage processor and a storage device from the plurality of storage devices in accordance with said command packet.

25. (CURRENTLY AMENDED) The method of claim 19 24, wherein the first storage processor includes a lookup table that associates one or more virtual logical unit numbers (VLUNs) with one or more physical logical unit numbers (PLUNs), wherein said one or more PLUNs are associated with said plurality of storage devices, and wherein said one or more VLUNs are virtualizations of said one or more PLUNs.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BARBARA N. BURGESS whose telephone number is (571)272-3996. The examiner can normally be reached on M-F (8:00am-4:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571) 272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Examiner, Art Unit 2457

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May 8, 2009

/ARIO ETIENNE/
Supervisory Patent Examiner, Art Unit 2457